Day 7 HW KEY

Monday, April 27, 2015 9:44 AM

Precalculus
Conic Section – Parabolas Day 1
Worksheet #6

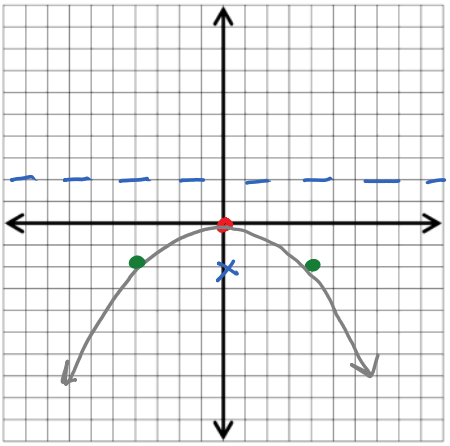
Name: Key
Period:

Directions: Find the vertex, focus, directrix, and focal width for each of the following. Use that information to create a graph of each parabola.

1. $x^2 = -8y$ opens down
Vertex: (0,0)

$4p = 8$
$p = 2$

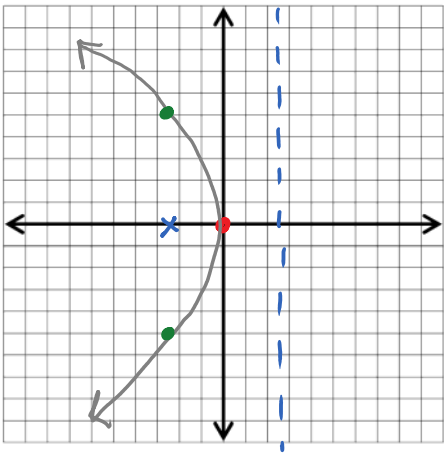
$f = (0, -2)$
$d = y = 2$
Focal width = 8



2. $y^2 = -10x$ opens Left
Vertex: (0,0)

$4p = 10$
$p = \frac{5}{2}$

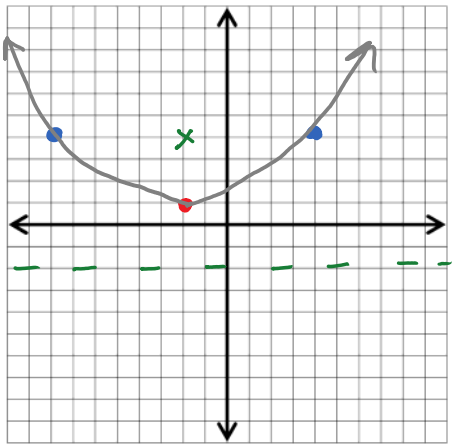
$f = (-\frac{5}{2}, 0)$
$d = y = 5/2$
F.W. = 10



3. $(x+2)^2 = 12(y-1)$ opens up
Vertex: (-2,1)

$4p = 12$
$p = 3$

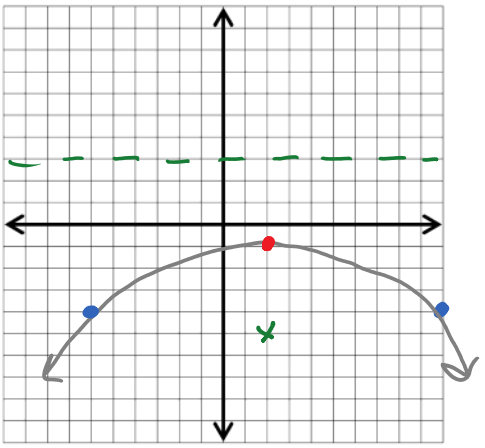
$F = (-2, 4)$
$d = y = -2$
F.W. = 12



4. $(x-2)^2 = -16(y+1)$ opens down
Vertex: (2,-1)

$4p = 16$
$p = 4$

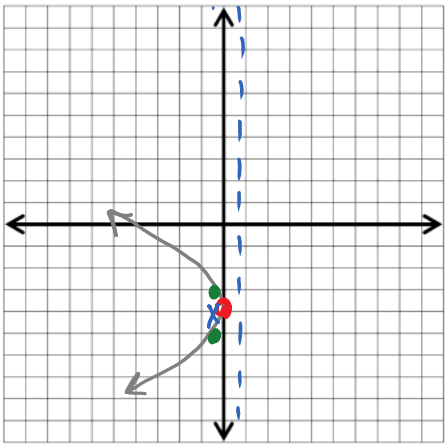
$F = (2, -5)$
$d = y = 3$
F.W. = 16



5. $(y+4)^2 = -2x$ opens left
V= (0,-4)

4p=2
p=½

F: (-½,-4)
d: x=½
F.W.: 2



6. $(y-5)^2 = 3(x+2)$ opens right
V: (-2,5)

4p=3
p=¾

F: (-1¼,5)
d: x=-2¾
F.W. =3